

deformed I decided to kill the bird. For this purpose I gave it three doses at different times of prussic acid on meat. Result, *nil*. Then I gave it arsenic twice, and still the bird lived, until finally I chloroformed it and skinned it. It had grown quite tame. The irides are a beautiful bright yellow, and eyes brighter and larger than the Boobook's, and constantly "winking" (conjuring), hence the specific name. The legs are short, thick, and powerful. The note or cry of this Owl is exactly like that of the Boobook.

BOOBOOK OWL (*Ninox boobook*).—I have little to note about this Owl. Mr. M'Lennan found five nests last year, two of which had clutches of three. This was in October and November. An interesting fact in connection with one nest (which had three young ones) is that in the same hollow of the branch, about 3 feet away, was a brood of three young Laughing Jackasses (Brown Kingfishers). What with the Jackass family being fed by day, and the Owl family by night, things must have been rather busy in that hollow. I recently sent a young Boobook Owl to my father, who put it in a rat-infested cellar in the city. The bird is free to fly about the large cellar, and since his advent not a rat has been heard of. Perhaps the Public Health authorities might here find a remedy for plague-infected rats.

A Visit to Rottnest Island, W.A.

BY F. LAWSON, PERTH.

ROTTNEST Island lies some 14 miles west-north-west of the port of Fremantle. It is only of small extent, being about 7 miles in length, and about 2 miles in breadth at its widest part. It is the most northern portion of a limestone ridge, running in a south-easterly direction towards the mainland. Other parts of this ridge form the islands of Karnac, Garden Island, and a few smaller rocks of no importance. The south-western side of Rottnest is for the most part a much-eroded line of cliffs, with an occasional small stretch of sandy beach.

The interior part of the island is clothed with very dense acacia scrubs, and, were it not for "rides" having been cut as means of communication, would be quite impenetrable without the most severe exertion. Except at the settlement on the eastern shores, trees are quite absent, and the majority of those found there have been artificially introduced. An important feature, from an ornithological point of view, is a series of large salt lakes or lagoons. In the hot weather these evaporate to a large extent, and become for the time being mud flats, forming favourite feeding grounds for numerous Waders.

There are few species of animals on the island; some of these, even, are introduced. But *Macropus brachyurus*, or short-tailed wallaby, is very common in the acacia scrubs.

Rottnest is reserved as a summer residence for the State Governor of Western Australia, and for a native penal settlement, so that it is very little disturbed by the presence of man.

I spent a full fortnight on the island, during which I devoted the whole time to an examination of the bird life. Breeding operations were in progress with several species, but I was too late for the nests of the Passerine birds.

HIERACIDEA BERIGORA (Striped Brown Hawk).—I several times encountered this species, but hardly think there were more than a pair or two on the island. On one occasion I surprised an individual engaged in plundering the bait from a crayfish basket. I also saw a pair attack and successfully carry off from the centre of the largest lagoon a wounded Banded Stilt.

CERCHNEIS CENCHROIDES (Kestrel).—A few pairs on the island, probably breeding in the cliffs.

PANDION LEUCOCEPHALUS (Osprey).—I had the good fortune to examine and photograph two eyries of this fine species—one with eggs, the other with a nearly full-grown nestling. In each case the nesting sites were turret-like spurs in the limestone cliffs, where the latter were at their greatest elevation. Neither was really difficult of access, though the rocks had weathered away into very rough and jagged prominences, rendering them very far from pleasant country to scramble over. The nests were large but rather shallow structures of short branches, lumps of wood, pieces of reed, and other flotsam to be found on the beach, with an interior lining of seaweed, sponges, straw bottle-covers, and a few reed-like plants of a smaller kind. The first nest contained three handsome eggs, hardly distinguishable from those of the Holarctic *P. haliaëtus*. In the case of the second nest the parent birds were hovering overhead, within easy shot, whilst I was taking a photograph of their home and offspring. Near at hand, on a spur projecting further out into the ocean, were the remains of an old nest, perhaps that of the previous year.

CORVUS CORONOIDES (Crow).—A few occasionally seen, probably visitors from the mainland. I shot one at dusk, unintentionally, being deceived in the semi-darkness. I saw no signs of the Raven, a species one might expect to find in such a locality.

PETROECA GOODENOVII (Red-capped Robin).—It is a remarkable fact that the Robin breeding on Rottnest should be this species, which is almost unknown within a very wide radius on the adjacent mainland. It seems fairly plentiful, but the song and call note struck me as being feeble in comparison with those of birds on the Murchison goldfield and interior in general. I saw no signs of *P. campbelli* on Rottnest.

SERICORNIS MACULATA (Spotted Scrub-Wren).—I encountered a few family parties in the thick acacia scrub. It was very difficult to procure specimens for identification.

EPHTHIANURA ALBIFRONS (White-fronted Chat).—One or two seen near the salt lagoons.

PACHYCEPHALA OCCIDENTALIS (Western Thickhead).—Not uncommon in the acacia scrubs. From the appearance of several I dissected, I have no doubt that males pair before they have fully attained the brilliant yellow under parts.*

* See *P. gutturalis*, "Nests and Eggs" (Campbell), p. 320.—EDS.

PACHYCEPHALA RUFIVENTRIS (Rufous-breasted Thickhead).—Occurring in similar localities but less common than the last named.

ZOSTEROPS GOULDI (Green-backed White-eye).—The commonest bird on the island.

PTILOTI SONORA (Singing Honey-eater).—Not uncommon in the acacia scrubs. Birds of this species inhabiting Rottnest are certainly much darker on the breast and under parts, and have the dusky stripes better defined than examples from the interior of the mainland.

HIRUNDO NEOXENA (House Swallow).—This was the only representative of the *Hirundinidæ* I found on the island. It was fairly common, and, in addition to breeding in outhouses and similar situations, was nesting in cavernous hollows in the limestone cliffs.

ANTHUS AUSTRALIS (Pipit).—Fairly common, and breeding on the shores of the lagoons.

CUCULUS PALLIDUS (Pallid Cuckoo).—Sparingly met with on the island.

NEOPHEMA PETROPHILA (Rock-Parrakeet).—This pretty little species is fairly common, but seems to favour the western side of the island, where it breeds on several small islets, and occasionally on the most precipitous slopes of the mainland cliffs. For a nesting site it takes advantage of any natural hollow in the limestone rock. I examined half a dozen or more nests. All of these were on the summits or slopes of islets, not in the face of the cliffs. The favourite situation appeared to be under a large slab of rock overhung by a profuse growth of vegetation (*Mesembryanthemum*). In one instance I found young in down in a slight hollow in the sandy soil, simply concealed by vegetation, and without other shelter. The eggs vary from four to six; they are inclined to be spherical, and of the usual white colour. When a nest is being examined the old birds fly round with great rapidity, or perch on a neighbouring rock, whence they exhibit great anxiety. Young in first plumage lack the blue forehead band. In traversing the island I often disturbed pairs or small parties of this Parrakeet, generally in the more open parts. Their chief food seems to be small round seeds, but I could not identify of what species of plant.

HÆMATOPUS UNICOLOR (Sooty Oyster-catcher).—I encountered a few examples of this species at the western extremity of the island, but saw little evidence of their breeding. The deep red beak and legs are very conspicuous in flight.

ÆGIALITIS RUFICAPILLA (Red-capped Dottrel).—Very common both on the beach and the margins of the lagoons. I caught one example in down, but the breeding season was for the most part over.

ÆGIALITIS CUCULLATA (Hooded Dottrel).—I only observed a few examples in company with other Waders round the lagoons.

CLADORHYNCHUS AUSTRALIS (Banded Stilt, "Rottnest Snipe").—Towards the close of my stay this species was beginning to arrive. A flock of 70 or 80 took up their quarters on the largest of the salt lagoons. The majority appeared to be adult birds. They were very wary, and on being disturbed flew to the centre of the lagoon, where they floated lightly on the water till the danger had passed.

ARENARIA INTERPRES (Turn-stone).—A few in company with other Waders.

LIMONITES RUFICOLLIS (Little or Red-necked Stint).—The commonest

Waders on the island. They were very numerous and tame round the lagoons. Adults and birds of the year were equally common.

HETEROPYGIA ACUMINATA (Sharp-tailed Stint, Siberian Pectoral Sandpiper).—Less common than the last-named species, but still fairly plentiful, both as regards adults and birds of the year.

ANCYLOCHILUS SUBARQUATUS (Curlew Stint or Sandpiper).—A few individuals in company with other Waders, but far from common.

STERNA BERGII (Crested Tern).—Fairly common. I encountered one very large flock, all of which appeared to be adults. I visited one reputed breeding ground, but saw no traces of nests. Probably this species breeds later in the year.

STERNA NEREIS (White-faced Ternlet).—Only one or two individuals seen.

LARUS NOVE-HOLLANDIÆ (Silver Gull).—This was the common Gull on the island. Nearly all I saw were adults. On one little islet I found half a dozen empty nests, and one half-grown young one crouching in the vegetation growing in the clefts of the rocks.

PHALACROCORAX HYPOLEUCUS (Pied Cormorant).—Pretty common. I often disturbed pairs or odd birds from hollows in the cliffs, but could find no nests. They are reported to breed on some of the islets between Rottnest and Garden Islands.

ANAS SUPERCILIOSA (Wild Duck).—I saw very few Ducks indeed during my visit; but on one occasion encountered a small flock or family, apparently of the above species, on one of the lagoons.

PUFFINUS (? sp.) (Petrel).—At the west end of the island I was shown a small series of burrows said to be tenanted by Mutton-Birds. In the excavated sand at the entrance to most of the burrows the print of the webbed feet was plainly visible. Attempts to dig out the egg or young with the aid of a piece of wood proved futile, the burrows extending too far. I planned a second visit, this time armed with a spade, but owing to an accident in connection with our horse and buggy the second attempt was likewise a failure, so that the species remains undetermined *

Of course, the foregoing list does not pretend to be anything like a complete catalogue of the avifauna of the island. It would be remarkable if many of the rarer Waders are not occasional visitors. The same remarks apply still more forcibly to the Cormorants and sea birds in general. Only a resident observer could tabulate a complete list.

A Glance at the Birds of the Moore River (W.A.)

BY F. LAWSON, PERTH.

TOWARDS the end of October, 1903, I found myself at Mogumber, a station on the Midland Railway, about 60 miles north of Perth.

I here expected to meet my companions on a projected trip to the Wongan Hills. Some delay, however, occurred in their

* The species is, no doubt, the Wedge-tailed Petrel (*P. sphenorurus*).—see Campbell, "Nests and Eggs," p. 877.—EDS.